

ZIKA VIRUS



Hamilton County Health Department
Health Education Division

www.hamiltoncounty.in.gov

The Reader Will Be Able To...

- Describe two ways the Zika virus is transmitted.
- List two groups of people who are at increased risk of developing the virus.
- Recall two symptoms of the virus.
- State two ways the Zika virus can be prevented.



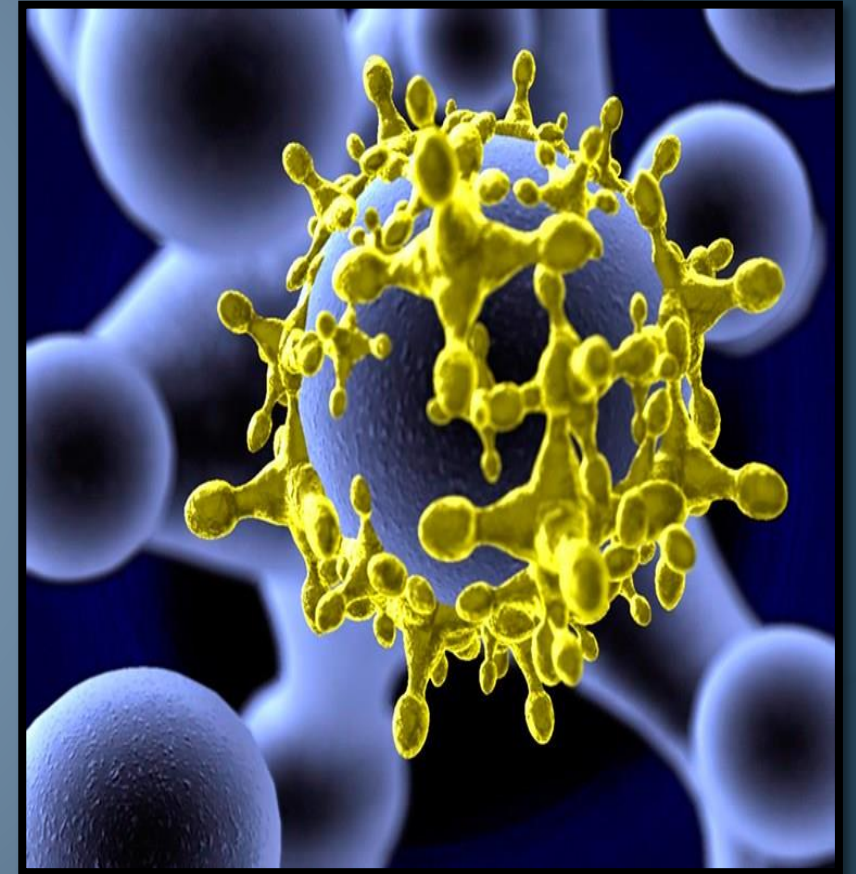
World Health Organization ...

World Health Organization issued a public health emergency about the Zika Virus on February 1, 2016.



What is the Zika Virus?

- ⦿ Zika virus is an emerging mosquito-borne virus that was first identified in Uganda in 1947 in rhesus monkeys. (WHO)
- ⦿ Zika virus is in the Flaviviridae family of viruses.
- ⦿ Zika was identified in humans in 1952 in Uganda and the United Republic of Tanzania.
- ⦿ Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia and the Pacific.



Zkia Virus

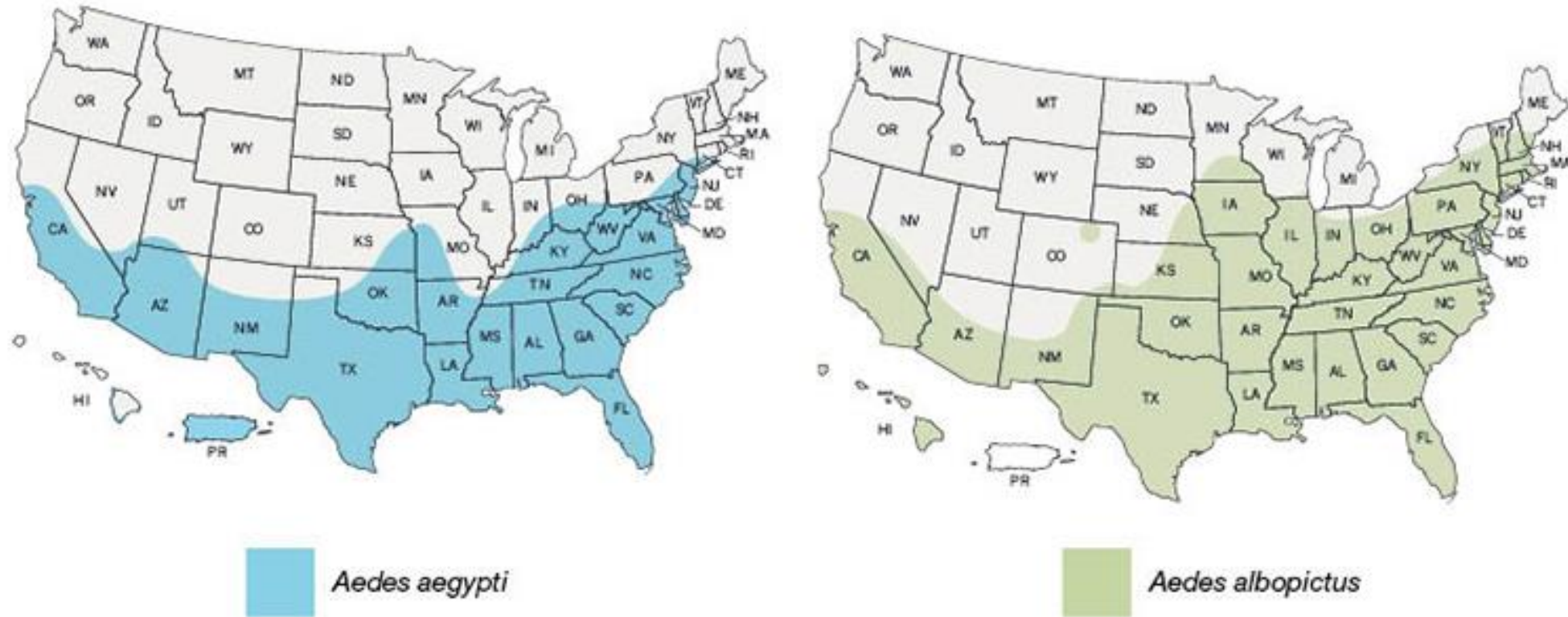
What Causes Zika?

- ⦿ Zika is a disease caused by the Zika virus and is spread to people primarily through the bite of an infected *Aedes* species mosquito.
- ⦿ This species of mosquito are aggressive daytime biters and also bite at night.
- ⦿ Zika is related to dengue, yellow fever, Japanese encephalitis, and West Nile virus. It is also closely related to Chikungunya.

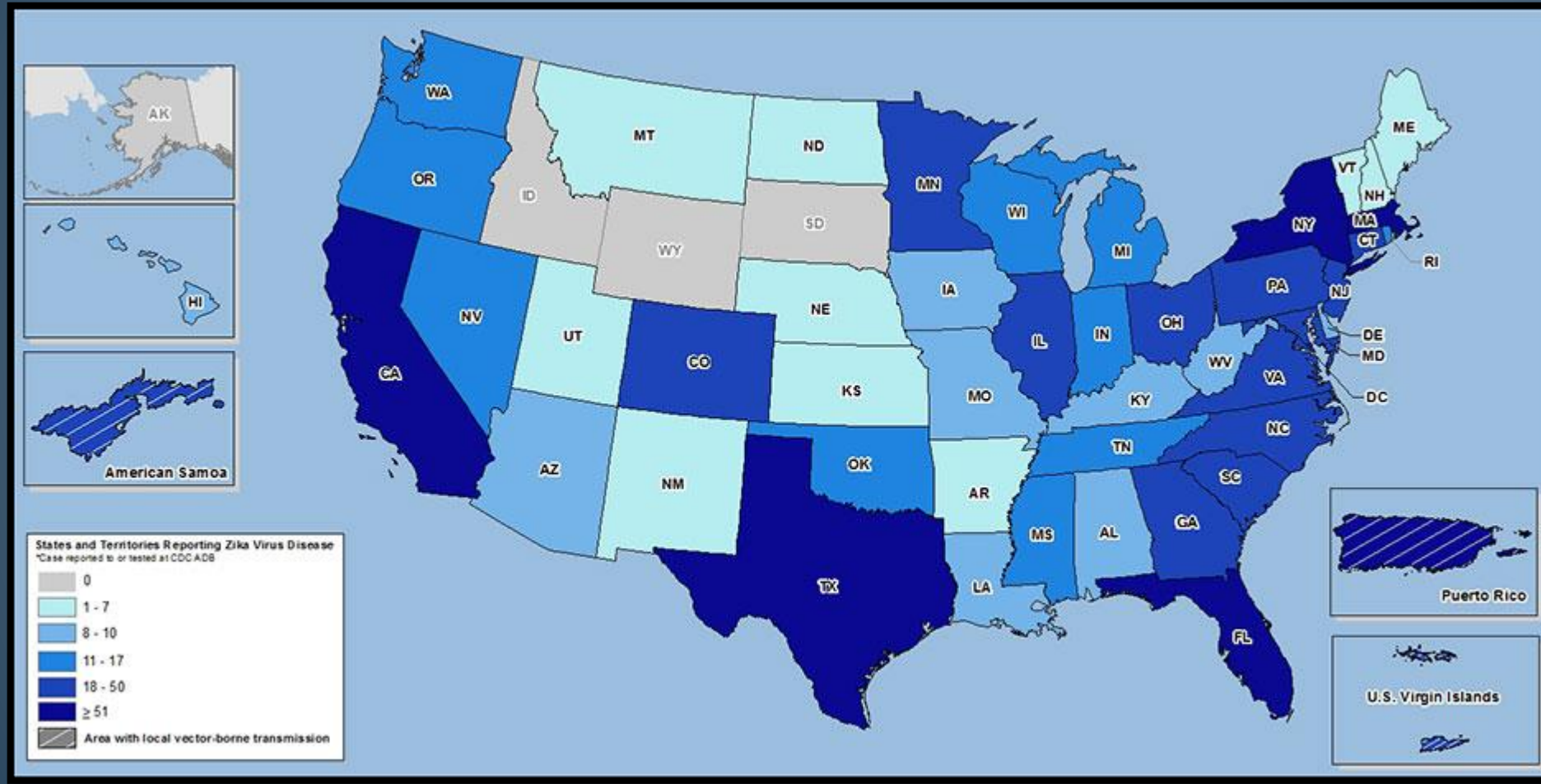


Aedes mosquito

Aedes Map In The United States...



Zika Virus In The United States 2015–2016...

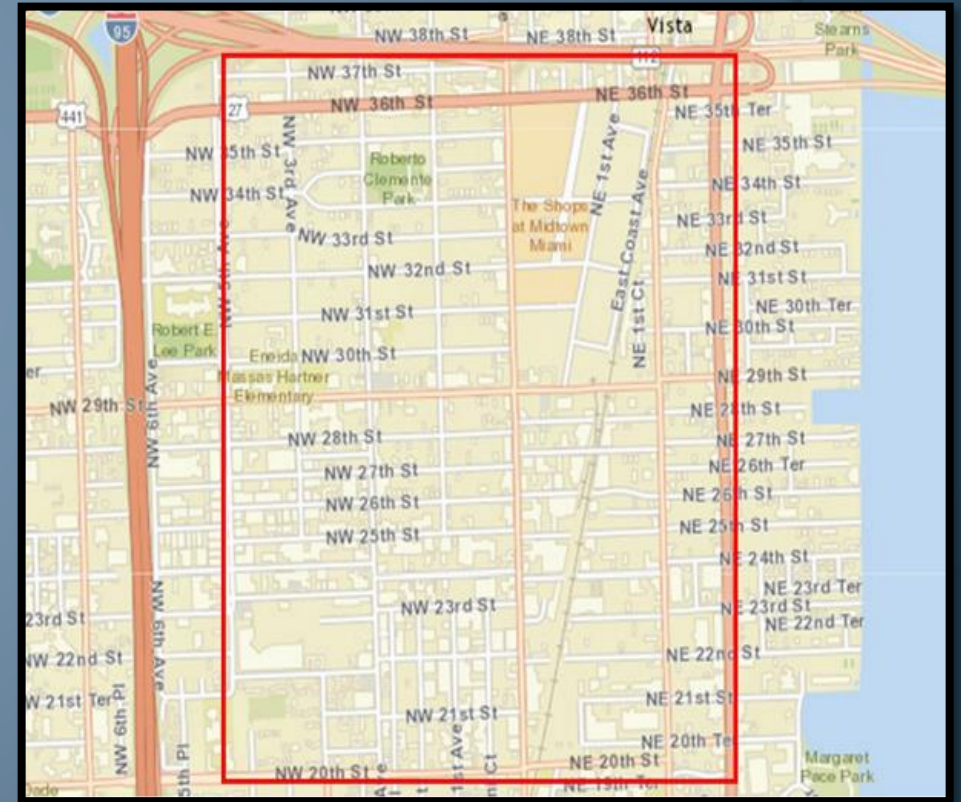


To see current case in the United States, please click on the map.

Source: CDC

Advice For People Living In Or Traveling To Wynwood, A Neighborhood In Florida...

- The Florida Department of Health (FL DOH) has identified an area with local mosquito-borne Zika virus transmission (active Zika virus transmission) in Miami.
- Pregnant women should avoid non-essential travel to the area with active Zika virus transmission identified by the FL DOH.



Area in Miami, FL where Zika virus is being spread by mosquitoes.

To learn more, click on the map.

Guillian-Barrè Syndrome...

- ⦿ This is a rare disorder in which a person's own immune system damages the nerve cells, causing weakened muscles and sometime paralysis.
- ⦿ These symptoms can last a few weeks or several months.
- ⦿ Most people will fully recover from this. Some people have life long damage in rare cases.
- ⦿ More research is started to see if the Zika virus can cause Guillian-Barrè Syndrome



How is Zika Transmitted?

- ⦿ Mosquitoes become infected when they feed on a person already infected with the virus.
- ⦿ Infected mosquitoes can then spread the virus to other people through bites.



How is Zika Transmitted?

- ⦿ It is possible that Zika virus could be passed from a mother to her baby during pregnancy.
- ⦿ Zika can be spread through blood transfusion and sexual contact.
- ⦿ During the first week of infection, Zika virus can be found in the blood and passed from an infected person to a mosquito through mosquito bites.



Map of Countries and Territories With Active Zika Virus Transmission...



Source : CDC

To see a updated map, please click on the map.

What Are Symptoms Of Zika Virus?

- ⦿ The most common symptoms of Zika virus are:
 - Fever
 - Rash
 - Joint Pain
 - Conjunctivitis (Red Eye)
- ⦿ Other common symptoms include:
 - Muscle Pain
 - Headache
- ⦿ The incubation period (the time from exposure to symptoms) for Zika disease is not known, but is likely to be a few days to a week.



What are the Symptoms of Zika Virus?

- The illness is usually mild with symptoms lasting for several days to a week.
- An estimated 80% of persons infected with Zika virus are asymptomatic (have no symptoms) CDC.
- People usually don't get sick enough to go to the hospital, and they very rarely die of Zika virus.
- Zika virus usually remains in the blood of an infected person for about a week, but it can be found longer in some people.



What Group Is At Risk For Developing Zika Virus?

- Anyone who lives in or travels to an area where Zika virus is found and has not already been infected with Zika virus can develop it from mosquito bites.
- Women in childbearing years.
- Pregnant women.
- Women who are sexually active with men who have traveled to Zika infected areas.
- Women who are infected with Zika can pass the virus to her male sex partner.



Pregnant Women...

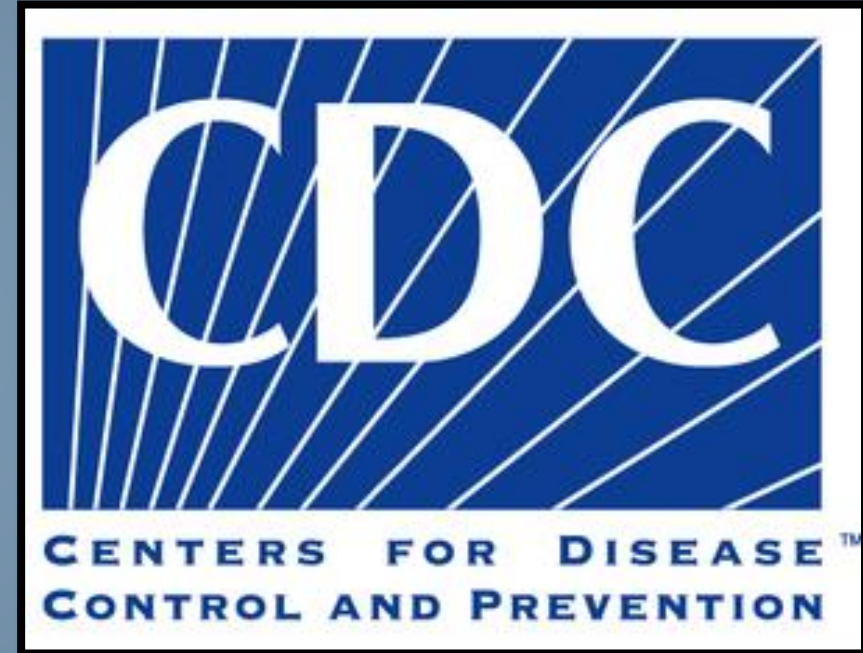
- Pregnant women can be infected with Zika virus in any trimester.
- Mother to baby transmission of Zika virus has been documented throughout pregnancy.
- Currently it is not known if Zika virus can cause death of a unborn child.
- Infants born to mothers infected with Zikia virus have developed Microcephaly.



New Guideline For Pregnant Women...

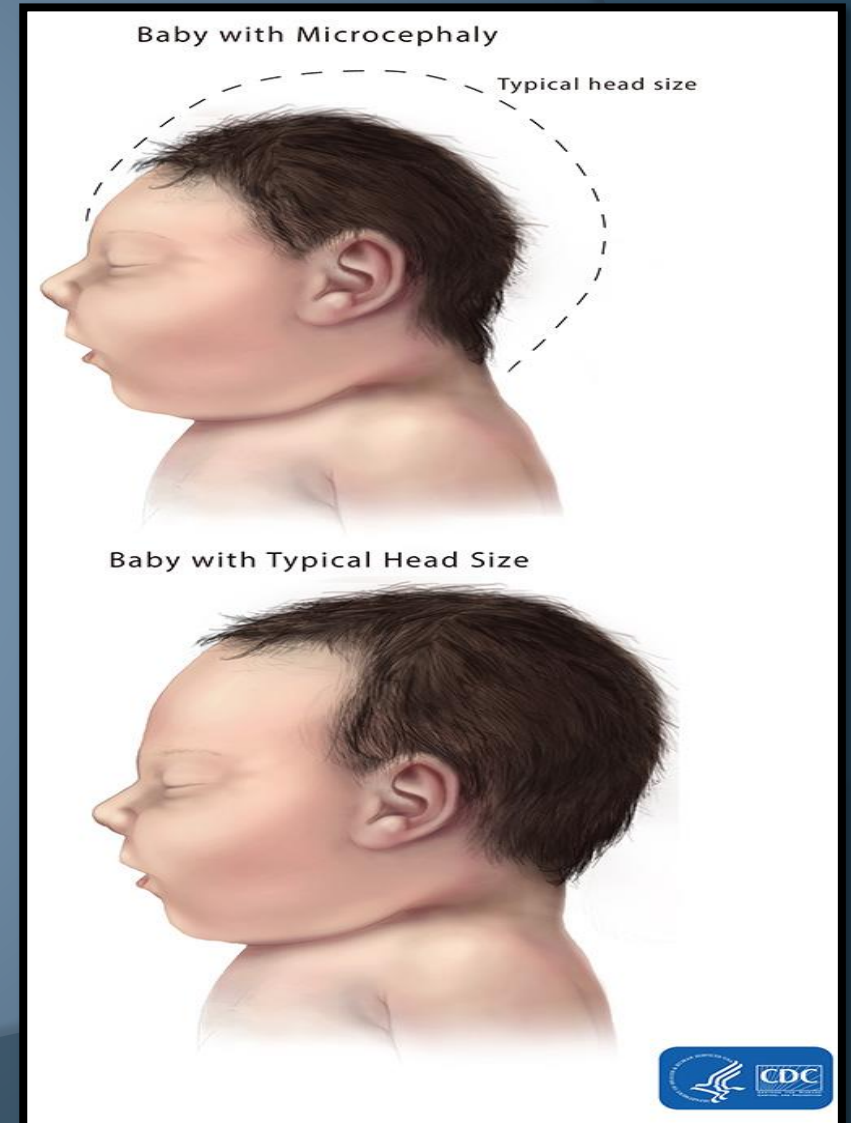
- ⦿ All pregnant women in the United States should be assessed for their risk of contracting the Zika virus at **each prenatal visit** with their doctor.

CDC: 8/1/2016



Microcephaly?

- Congenital Microcephaly is a condition where a baby's head is much smaller than expected.
- Microcephaly can occur because a baby's brain has not developed properly during pregnancy or has stopped growing after birth, which results in a smaller head size.



Microcephaly?

- ⦿ Babies with microcephaly can have a range of problems, depending on how severe their microcephaly is.
- ⦿ Some of the problems these babies have are:
 - Seizures
 - Developmental delay, such as problems with speech or other developmental stages such as sitting, standing and walking. Intellectual disability (decreased ability to learn and function in daily life)
 - Problems with movement and balance
 - Feeding problems, such as difficulty swallowing
 - Hearing loss
 - Vision problems
 - The problems can range from mild to severe and are often lifelong
 - In some cases, these problems can be life-threatening

Pregnant Women Traveling...

- Should consider postponing travel to any area where Zika virus is spreading.
- If you MUST travel to an area where Zika virus is spreading, talk to your healthcare provider and strictly follow steps to prevent mosquito bites during your trip.
- If you have traveled to an area infected with the Zika virus, talk to your healthcare provider even if you are not have any signs or symptoms of illness.
- If you start having any of the signs or symptoms contact your healthcare provider immediately!



Women Who Are Trying To Become Pregnant...

- Before you travel to a area where Zika virus is spreading, talk to your healthcare provider about your plans to become pregnant and the risk of Zika virus.
- Strictly follow steps to prevent mosquito bites during your trip.
- If your sex partner has traveled to an area where Zika virus currently is, use a condom correctly every time for oral, vaginal and anal sex, or abstain from sexual activity for the duration of the pregnancy.
- Zika virus has been found in semen for two to possibly ten weeks.



Men And Zika Virus...

- It is recommended that men who have lived in or traveled to an area with Zika virus abstain from sex or correctly use condoms every time for vaginal, anal, and oral sex.
- Men who live or are traveling in an area with active Zika virus transmission should take steps to prevent mosquito bites.
- If a man develops symptoms of Zika virus illness at any time during his travel or within two weeks after he returns, he should see his healthcare provider to see if he has Zika virus or another illness.



Blood Donation...

- The American Association of Blood Banks is requesting self-deferral from donation until 28 days after travel to:
 - Mexico, the Caribbean, or Central or South America.
- The goal of the self-deferral is to impede the potential threat to blood recipients and make sure the nation's blood supply remains safe.
- When a person donates blood, they will be screened to see if they have been to the areas of concern. If they have, they will be deferred for 28 days.



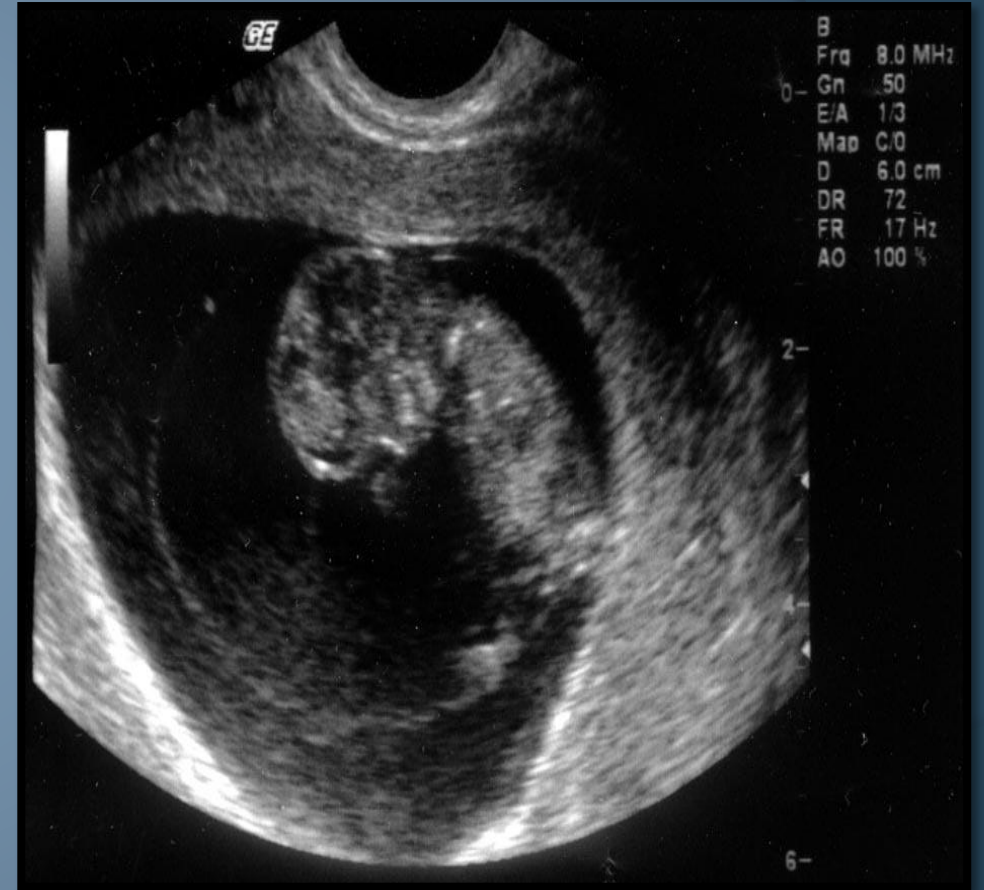
Test for Zika Virus?

- See your healthcare provider if you develop the symptoms described above and have visited an area where Zika virus is found.
- If you have recently traveled, tell your healthcare provider when and where you traveled.
- Your healthcare provider may order specialized blood tests to look for the virus.



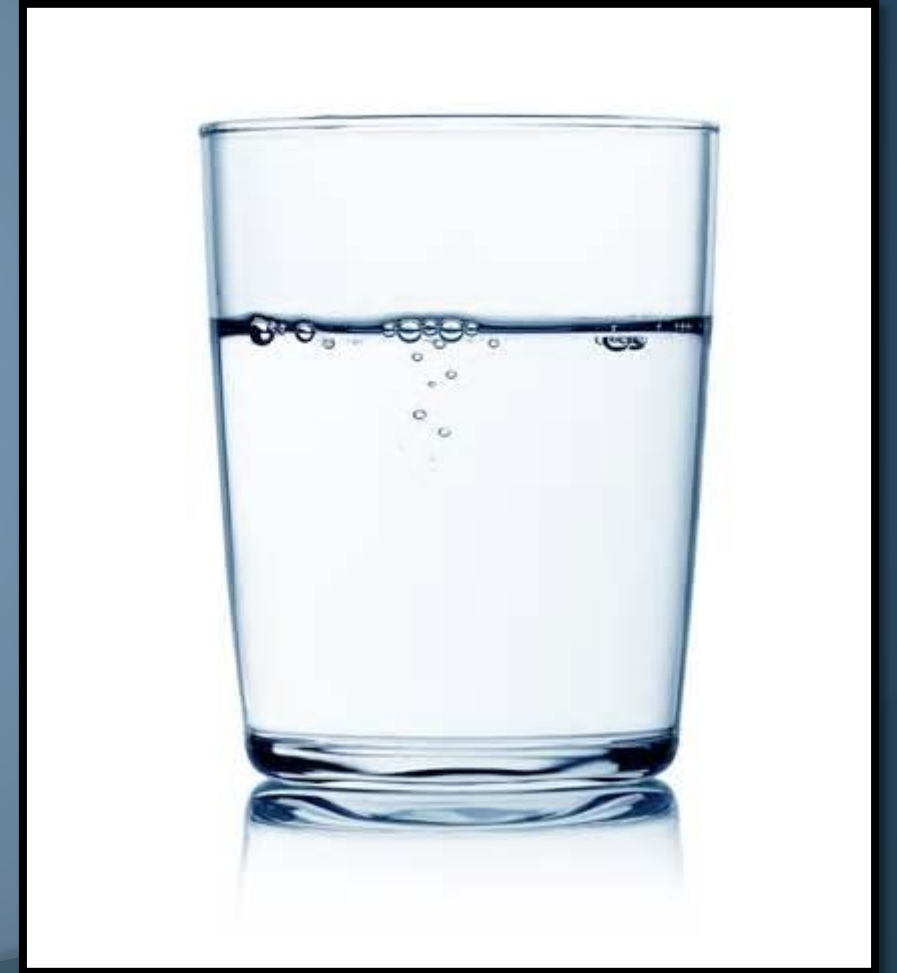
If You Are Pregnant What Test Can Be Done?

- A blood test can be done.
- Testing can be offered 2–12 weeks after pregnant women return from travel.
- Testing is recommended during the first week of illness for pregnant women with signs and symptoms of Zika virus
- Ultrasound
- Zika virus testing can be performed on amniotic fluid



Treatment?

- ⦿ There is no vaccine to prevent, or specific medicine to treat, Zika infections.
- ⦿ Treat the symptoms:
 - Get plenty of rest.
 - Drink fluids to prevent dehydration.
 - Take medicine such as acetaminophen (Tylenol®) to relieve fever and pain.
 - **Do not take aspirin and other non-steroidal anti-inflammatory drugs.**
 - If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.
- ⦿ Once a person has been infected, he or she is likely to be protected from future infections.



How can Zika Virus Be Prevented?

- ① Eliminate standing water in and around your home
- ① If you have a septic tank, follow these steps:
 - Repair cracks or gaps.
 - Cover open vents or plumbing pipes.
 - Use wire mesh with holes smaller than an adult mosquito.
- ① Keep mosquitoes out of your home:
 - Use screens on windows and doors.
 - Repair holes in screens.
 - Use air conditioning when available.



How can Zika Virus Be Prevented?

- Prevent mosquito bites:
 - Use an Environment Protection Agency (EPA)-registered insect repellent.
 - Wear long-sleeved shirts and long pants.
 - Sleep under a mosquito bed net if you are overseas or outside and not able to protect yourself from mosquito bites.



Examples Of Insect Repellents...

Active Ingredient Higher percentage of active ingredient provides longer protection	Some brand names examples*
DEET	Off, Cutter, Sawyer, Ultrathon
Picaridan,also know as KBR 3023, Bayrepal, and Icaridin	Cutter Advantage, Skin So Soft Bug Guard Plus
IR3535	Skin So Soft Guard Plus Expedition, Skin Smart
Oil of Lemon Eucalyptus (OLE) or Para-Menthane-diol (PMD)	Repel

*Insect repellent brand names are provided for your information only. The Centers for Disease Control and Prevention and the U.S. Department of Health and Human Service cannot recommend or endorse any name brand product.

Source: CDC

Insect Repellent's 101...

- Things to remember when using insect repellents:
 - Pregnant women and women who are breastfeeding can use a EPA registered insect repellent.
 - Always follow the product label instructions.
 - Reapply insect repellent every few hours, depending on which product and strength you choose.
 - Do not spray repellent on the skin under clothing.
 - If you are also using sunscreen, apply sunscreen first and insect repellent second.
 - Treat clothing and gear (boots, pants, socks and tents) with permethrin or purchase permethrin-treated gear.



Prevention Of Zika Virus For Babies and Children...

- ⦿ Do not use insect repellent on babies younger than 2 months of age.
- ⦿ Dress your child in clothing that covers arms and legs.
- ⦿ Cover cribs, strollers, and baby carriers with mosquito netting.
- ⦿ Do not spray insect repellent onto a child's hand, eyes, mouth, a cut or irritated skin.
- ⦿ Adults should spray insect repellent onto their own hands and then apply to the child's face.



For More Information...

- ◎ Centers For Disease Control And Prevention
- ◎ Current Travel Alerts About Zika virus. (CDC)
- ◎ Hamilton County Health Department- Mosquito Control
- ◎ Indiana State Department of Health

Sources:

- ⦿ American Association Of Blood Banks
- ⦿ Centers For Disease Control And Prevention
 - Interim Guidelines for Prevention of Sexual Transmission of Zika Virus — United States, 2016
Early Release / February 5, 2016 / 65(5);1–2
 - Update: Interim Guidelines for Health Care Providers Caring for Pregnant Women and Women of Reproductive Age with Possible Zika Virus Exposure — United States, 2016
Early Release / February 5, 2016 / 65(05);1–6
- ⦿ *Mayo Clinic*
- ⦿ *World Health Organization*